

NORTH CAROLINA

Department of Transportation



















Board of Directors Meeting

North Carolina Turnpike Authority

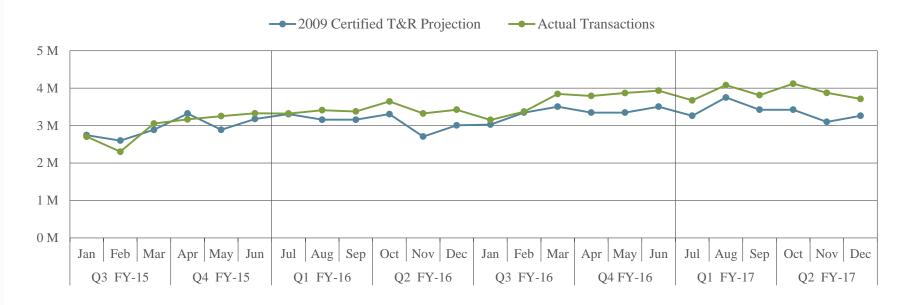
February 2, 2017

Triangle Expressway – 2nd Quarter Operations

Andy Lelewski, PE

Director of Toll Road Operations

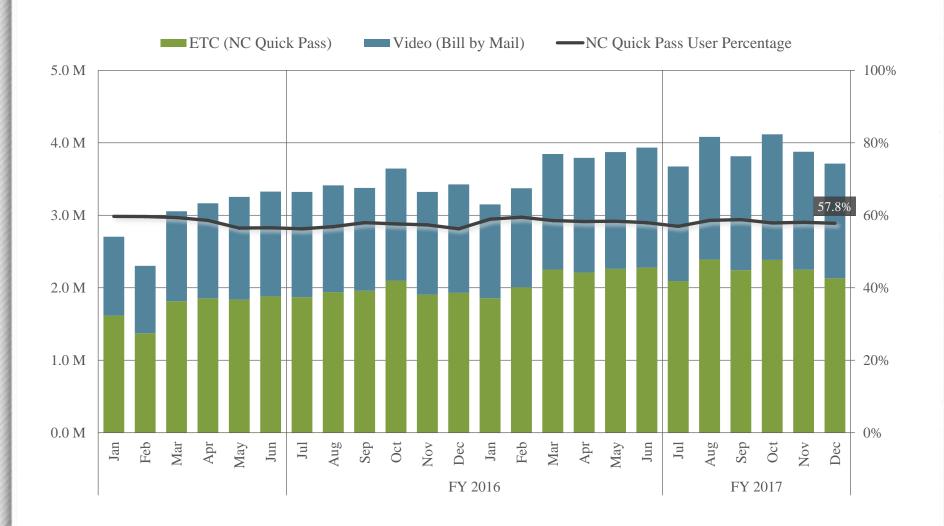
Transaction Statistics



	Q3 FY-15	Q4 FY-15	Q1 FY-16	Q2 FY-16	Q3 FY-16	Q4 FY-16	Q1 FY-17	Q2 FY-17
Actual Transactions	8,063,472	9,747,177	10,114,193	10,393,787	10,370,030	11,596,894	11,570,102	11,706,855
2009 Certified Traffic and Revenue ¹	8,234,180	9,389,855	9,623,134	9,021,687	9,882,200	10,200,979	10,440,591	9,788,054
Delta	(170,708)	357,322	491,059	1,372,100	487,830	1,395,915	1,129,511	1,918,801
Percent of Actual vs. 2009 Base Case	98%	104%	105%	115%	105%	114%	111%	120%

¹Target monthly transaction data based on annualized numbers contained in the 2009 Certified Traffic and Revenue Report developed by CDM Smith

Toll Transactions by Type



New NC Quick Pass Accounts



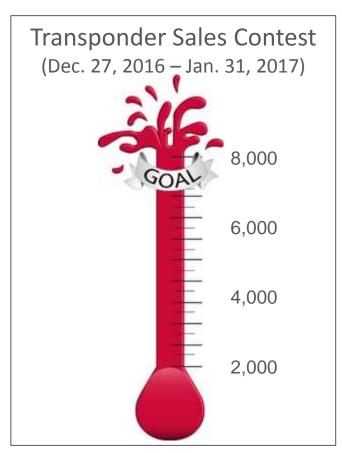
NC Quick Pass Transponders Sold



NC Quick Pass® Winter Transponder Promotion

- NC Quick Pass E-ZPass
 Transponder cost reduced by 50%
- Period: Dec. 1, 2016 Jan. 31, 2017
- Promotion included:
 - Bill-by-Mail Inserts
 - Storefront Signage
 - Social Media Advertising

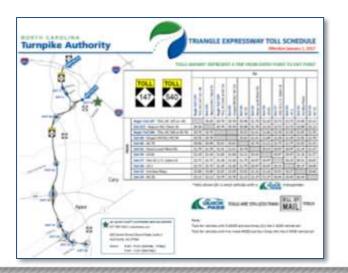


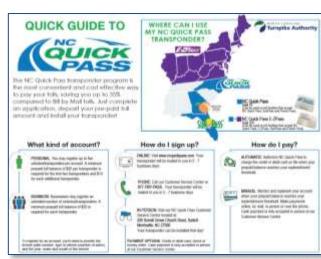


*January data based on raw transponder sales

NC Quick Pass® Program Enhancements

- New Storefront Customer Signage
- Interoperability Webpage Update
- Transponder Program Webpage Update
- Triangle Expressway Toll Rate Webpage Update





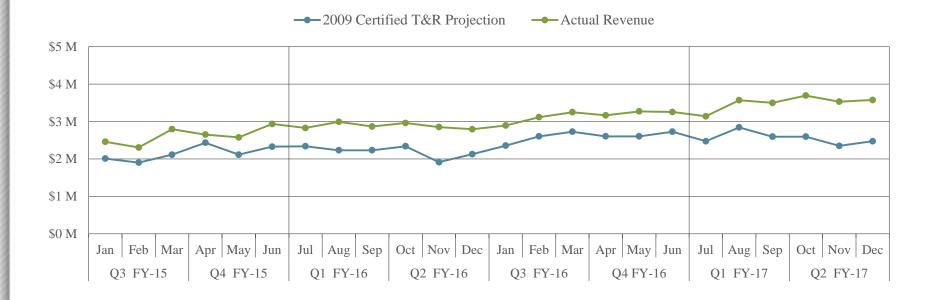


Triangle Expressway – 2nd Quarter Financials

David Roy

Director of Finance and Budget

Revenue Statistics

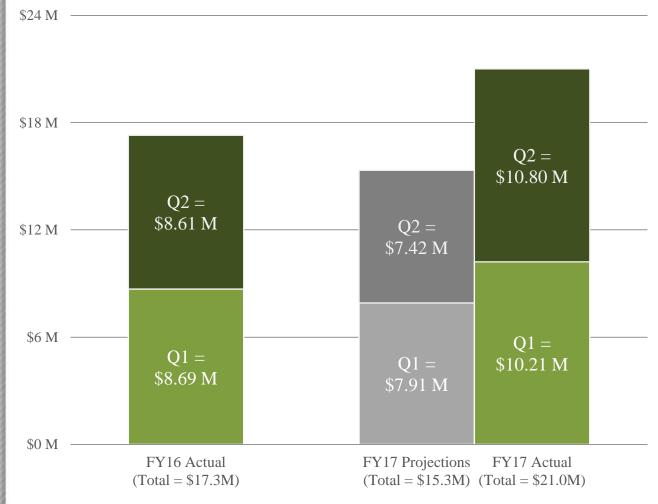


	Q3 FY-15	Q4 FY-15	Q1 FY-16	Q2 FY-16	Q3 FY-16	Q4 FY-16	Q1 FY-17	Q2 FY-17
Actual Revenue ¹	\$ 7,563,900	\$ 8,162,630	\$ 8,689,600	\$ 8,607,686	\$ 9,262,129	\$ 9,695,119	\$10,210,606	\$10,802,362
2009 Certified Traffic and Revenue ²	\$ 6,031,125	\$ 6,877,599	\$ 6,807,444	\$ 6,381,979	\$ 7,690,252	\$ 7,938,325	\$ 7,913,993	\$ 7,419,368
Delta (\$)	\$ 1,532,775	\$ 1,285,031	\$ 1,882,156	\$ 2,225,707	\$ 1,571,877	\$ 1,756,794	\$ 2,296,613	\$ 3,382,994
Percent of Actual vs. 2009 Base Case	125%	119%	128%	135%	120%	122%	129%	146%

¹Actual revenue is reported on a cash basis

²Target monthly revenue data based on annualized numbers contained in the 2009 Certified Traffic and Revenue Report developed by CDM Smith

Revenue Statistics

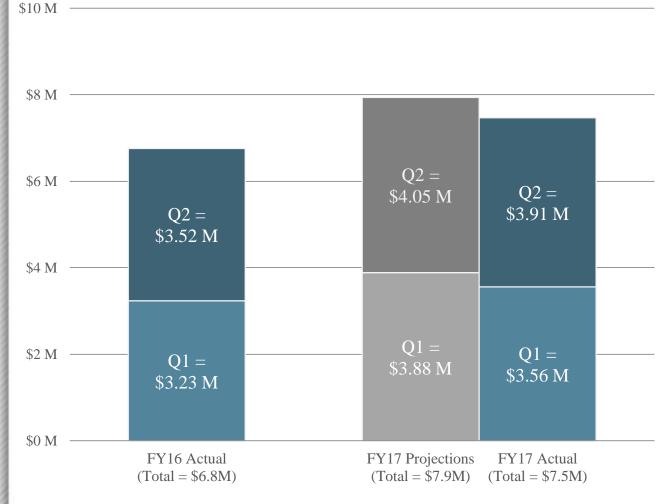


FY17 Quarter 2

- YTD revenues 37% higher than financing base case projections
- YTD revenues up 21.5% year-over-year

- Revenue figures are inclusive of all toll revenue and fees, but exclude transponder revenues (YTD = \$299,183.86)
- Actual revenues reported on a cash basis

Operating Expenditures



FY17 Quarter 2

YTD expenditures 5.9% lower than projected budget

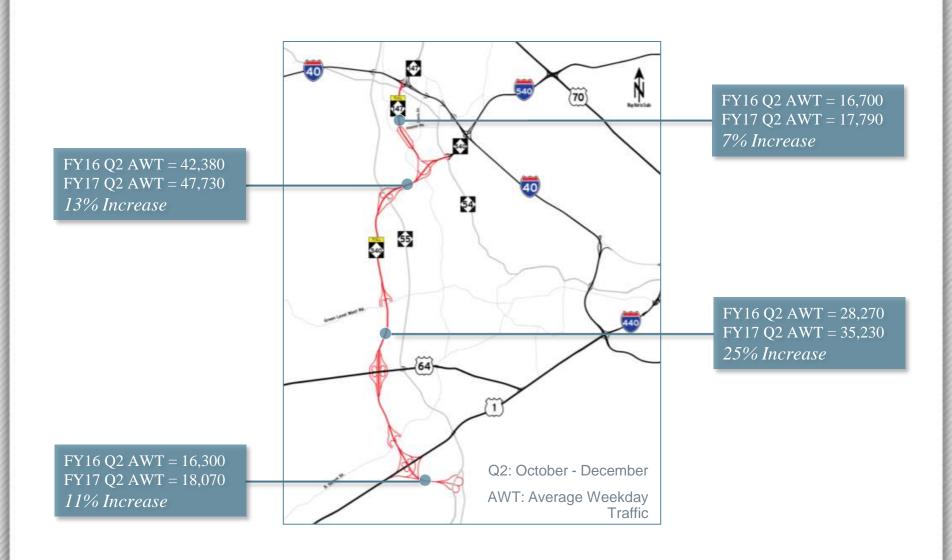
⁻ Actual operating expenditures reported on a cash basis

Triangle Expressway – Maintenance Report

Dennis Jernigan, PE

Project Controls Engineer

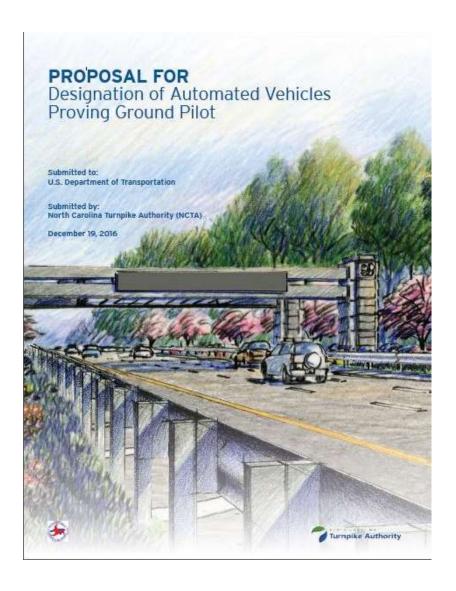
Mainline Traffic Statistics



Roadway Maintenance Statistics

	Q2 FY 2016	Q3 FY 2016	Q4 FY 2016	Q1 FY 2017	Q2 FY 2017
Road Surface	97.9	98.3	100.0	99.1	97.7
Unpaved Shoulders and Ditches	97.8	97.7	100.0	100.0	100.0
Drainage Structures	83.8	92.6	91.0	87.9	93.8
Roadside	90.5	92.1	83.4	90.0	93.7
Traffic Control Devices	92.2	93.5	96.1	90.5	88.3
Overall	92.8	94.9	94.7	93.4	93.9

Automated Vehicle Proving Ground



- 10 out of 60 applicants chosen
- Partners
 - NC State University
 - UNC Chapel Hill
 - Duke University
 - NC A&T University
 - UNC Charlotte
 - The Regional Transportation Alliance
 - NCDOT
- NCTA maintains control to safeguard safety and reliable customer service

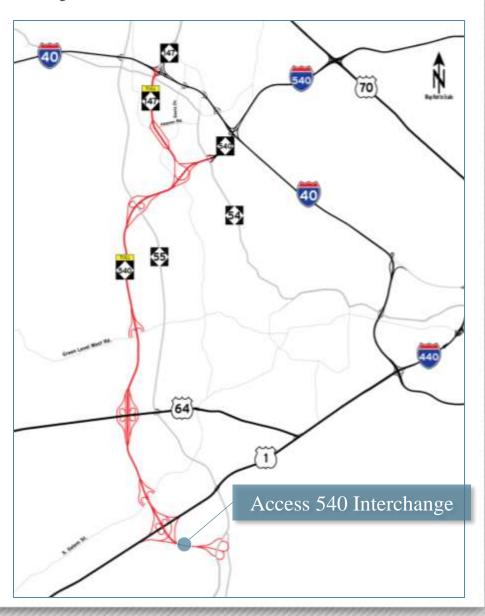
Veridea Parkway- Project Update

Dennis Jernigan, PE

Project Controls Engineer

Veridea Parkway Overview

- New interchange
- Widen bridge and Veridea
 Parkway
- 2 new All-Electronic Tolling (AET) sites on ramps
- Revised AET toll sites on mainline
- Design-Build contract awarded
 June 26, 2015
- Design-Build construction cost: \$18.4M



Toll Collection System Activities

- Roadside Toll Collection System
 - · Design for new toll zones at interchange and additional mainline toll lane
 - Complete
 - Mainline Gantries
 - Changes to accommodate new lanes
 - Sites complete to turn over to Toll Site Integrator
 - New Loop Toll Sites
 - New sites similar to those at N. Salem Street
 - Sites complete to turn over to Toll Site Integrator
- Back Office System
 - Changes to accommodate new toll zones
 - Complete





Schedule Update

 Site turned over to NCTA for toll integration and testing: February 6, 2017

Open to Traffic: Spring 2017

Final Completion: Summer 2017

Monroe Expressway – Project Update

Rick Baucom, PE

Construction Project Manager

Monroe Expressway Overview

- 20-mile long expressway
- 4 to 6 lanes wide (expandable to median)
- 37 bridges
- 21 box culverts
- 8 interchanges
- Open Road Tolling

Important Dates

ITS Integration – July 31, 2018

Substantial Completion – November 27, 2018

Final Completion – May 28, 2019

Monroe Bypass Constructors



Monroe Bypass Constructors is a Joint Venture comprised of three companies:



Anderson Columbia Company, Inc.



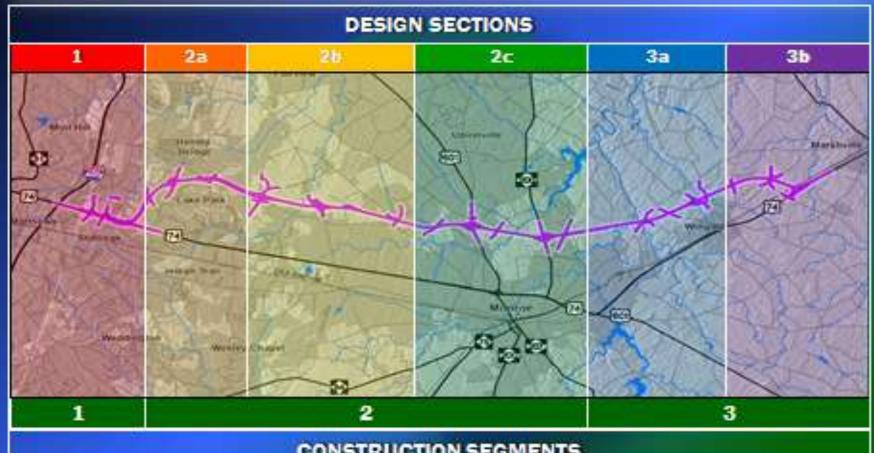
United Infrastructure Group, Inc.



Boggs Paving, Inc.



Project Segments & Sections

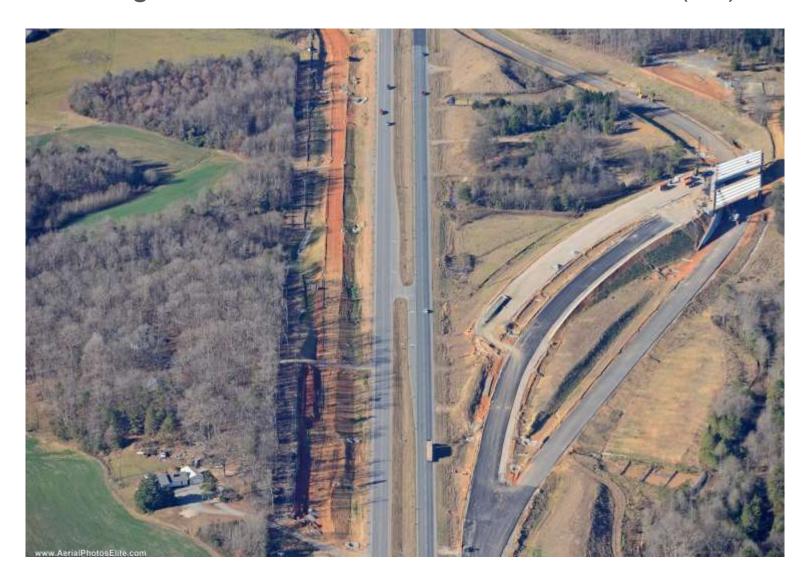


CONSTRUCTION SEGMENTS



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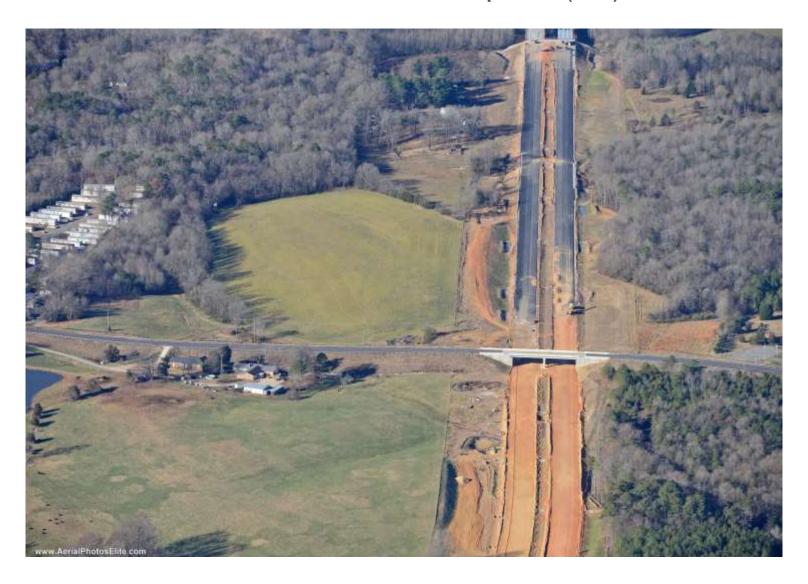
Grading at US 74 near CSX RR – December (3B)



Forest Hills School Road Overpass (3B)



Ansonville Road Overpass (3A)



Austin Chaney Rd. Interchange (3A)



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Austin Chaney Rd. to Monroe-Ansonville Rd. (3A)



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Monroe-Ansonville Rd. to Richardson Creek (3A)



Olive Branch Road Overpass (2C)



NC 200 Interchange - October (2C)



NC 200 Interchange - December (2C)



US 601 Interchange – October (2C)



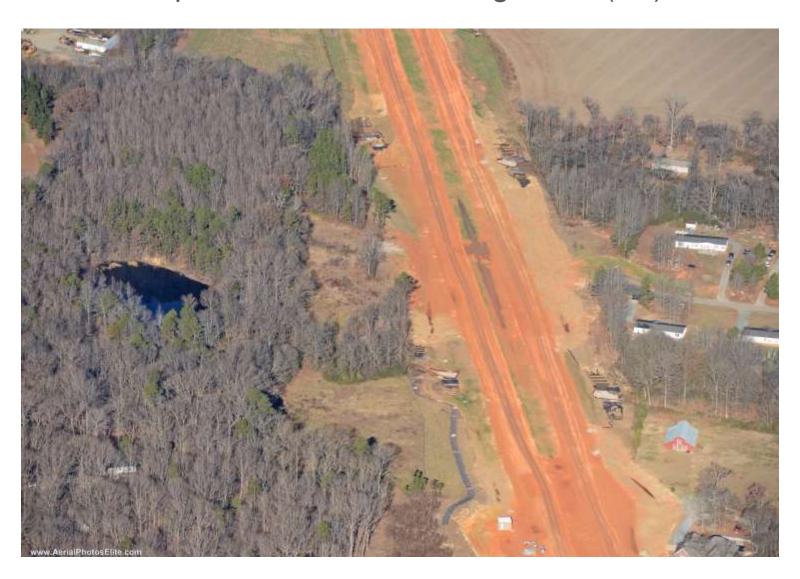
US 601 Interchange - December (2C)



Poplin Road Overpass (2B)



Poplin Road to Willis Long Road (2B)



Rocky River Rd. Interchange (2B)



Secrest Shortcut Road Overpass (2A)



Indian Trail – Fairview Rd. Interchange (2A)



Indian Trail-Fairview Rd. to US 74 (2A)



US 74 Interchange – West (1)



US 74 Elevated Section (1)



Monroe Expressway – Finance Update

David Roy

Director of Finance and Budget

Monroe Expressway Financing

Financing Structure:

- \$440 million funding available from State Appropriation Revenue Bonds, Series 2010A and Series 2011 and Senior Lien Turnpike Revenue Bonds, Series 2011
- \$137 million Monroe Expressway Toll Revenue Bonds, Series 2016
 - \$114.7 million of proceeds for construction, remaining proceeds fund capitalized interest, the senior lien reserve requirement and costs of issuance
 - Bond yield of 4.347%
- \$166.5 million TIFIA direct loan secured as subordinate debt under the toll revenue bonds trust agreement
 - Interest rate of 3.08%
- \$22 million of NCDOT STIP funding
 - Reduced from \$77 million under initial plan of finance
 - Used to fund the TIFIA Debt Service Reserve Fund of \$11 million and pay the fuel hedge premium. Remaining funds are available for construction costs

Additional Information:

- The blended cost of capital for the 2016 Toll Revenue Bonds and the TIFIA Loan is 3.65%
- The TIFIA Loan and the Bonds are both rated Baa3 and BBB- by Moody's and S&P, respectively.

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Funding Sources and Uses

Sources							
	Series 2010	Series 2011	Series 2011	State Highway	Series 2016	TIFIA	
	Approp Bonds	Toll Rev. Bonds	Approp Bonds	Trust Fund	Toll Rev. Bonds	Loan	Total
Par Amounts							
CIB	233,920,000	10,000,000	214,505,000		119,455,000	166,500,000	744,380,000
CAB					17,596,904		17,596,904
+Premium/-Discount			18,693,018		7,331,386		26,024,404
Total Bond Proceeds	233,920,000	10,000,000	233,198,018		144,383,290	166,500,000	788,001,308
State Highway Trust Fund¹				22,000,000			22,000,000
Cash Contribution for 2011 Defeasance					5,372,278		5,372,278
Total Sources	233,920,000	10,000,000	233,198,018	22,000,000	149,755,569	166,500,000	815,373,587

		Us	es				
	Series 2010	Series 2011	Series 2011	State Highway	Series 2016	TIFIA	
	Approp Bonds	Toll Rev. Bonds	Approp Bonds	Trust Fund	Toll Rev. Bonds	Loan	Total
Construction Cost							
Construction Fund Deposit	198,793,929	9,819,500	231,735,079	9,286,648	114,735,345	166,500,000	730,870,501
Capitalized Interest Fund - Series 2010 Approp							
Bonds	29,081,083						29,081,083
DSRF - Series 2010 Approp Bonds	4,303,953						4,303,953
Capitalized Interest Fund - Series 2016 TR Bonds					15,437,176		15,437,176
DSRF - Series 2016 TR Bonds					11,833,180		11,833,180
DSRF - TIFIA Loan ¹				11,942,392			11,942,392
Fuel Hedge Cap Premium ¹				322,439			322,439
2011 Redemption					6,375,333		6,375,333
Underwriter's Discount					507,937		507,937
Cost of Issuance	1,741,036	180,500	1,462,939	448,521	866,596		4,699,592
Total Uses	233,920,000	10,000,000	233,198,018	22,000,000	149,755,569	166,500,000	815,373,587

^{1.} For tax purposes, cash is being used to fund the TIFIA reserve and the cost of the Fuel Price Hedge.

Projected Debt Service Coverage Ratios*

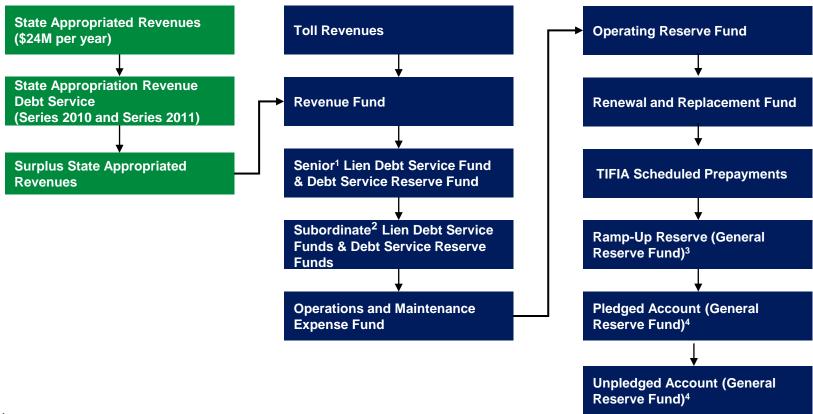
Fiscal Year (6/30) 2015 2016 2017 2018 2019	Total Gross DS 2,503,774 5,969,263	Capitalized Interest	Net DS	TIFIA Loan (Mandatory Payments)	Revenues (Excl. Interest Earnings)	2016 Bonds	TIFIA	All-in
(6/30) 2015 2016 2017 2018	2,503,774 5,969,263	Interest			•		TIFIA	All-in
2015 2016 2017 2018	2,503,774 5,969,263	Interest	DS		•			
2016 2017 2018	5,969,263				Laiiiiiyə)	Coverage	Coverage	Coverage
2017 2018	5,969,263							
2018	5,969,263							
		(2,503,774)						
2019	= 000 000	(5,969,263)						
	5,969,263	(5,969,263)			7,519,000			1.00x
2020	5,969,263	(994,877)	4,974,385		18,055,000	3.63x	3.63x	1.03x
2021	5,969,263		5,969,263	2,412,272	23,659,000	3.96x	2.82x	1.07x
2022	5,969,263	0.00	5,969,263	2,211,250	27,644,000	4.63x	3.38x	1.14x
2023	7,109,263		7,109,263	4,858,110	29,767,000	4.19x	2.49x	1.07x
2024	5,912,263	and concern	5,912,263	6,261,857	31,292,000	5.29x	2.57x	1.01x
2025	5,912,263		5,912,263	6,805,824	32,750,000	5.54x	2.58x	1.01x
2026	6,827,263		6,827,263	7,013,681	33,856,000	4.96x	2.45x	1.01x
2027	7,027,263		7,027,263	7,240,837	34,890,000	4.96x	2.45x	1.02x
2028	7,497,263		7,497,263	7,240,837	36,020,000	4.80x	2.44x	1.01x
2029	7,542,263		7,542,263	7,642,882	37,137,000	4.92x	2.45x	1.01x
2030	7,727,263		7,727,263	7,819,380	38,020,000	4.92x	2.45x	1.02x
2031	7,862,263	9.00	7,862,263	8,043,521	38,898,000	4.95x	2.45x	1.16x
2032	8,087,263	10.00	8,087,263	8,273,491	40,013,000	4.95x	2.45x	1.17x
2033	8,312,263		8,312,263	8,516,326	41,157,000	4.95x	2.45x	1.06x
2034	8,547,263		8,547,263	8,773,635	42,365,000	4.96x	2.45x	1.08x
2035	8,817,263		8,817,263	9,027,929	43,645,000	4.95x	2.45x	1.09x
2036	9,072,263		9,072,263	9,292,877	44,910,000	4.95x	2.45x	1.11x
2037	9,312,263		9,312,263	9,589,988	46,228,000	4.96x	2.45x	1.12x
2038	9,647,263		9,647,263	9,860,967	47,706,000	4.95x	2.45x	1.14x
2039	9,907,263		9,907,263	10,151,847	49,054,000	4.95x	2.45x	1.13x
2040	10,197,263		10,197,263	10,454,989	50,501,000	4.95x	2.45x	1.15x
2041	10,537,263		10,537,263	10,729,184	52,009,000	4.94x	2.45x	1.16x
2042	10,802,500		10,802,500	11,025,893	53,373,000	4.94x	2.45x	1.18x
2043	11,092,000		11,092,000	11,338,684	54,849,000	4.94x	2.45x	1.30x
2044	11,399,750		11,399,750	11,665,145	56,405,000	4.95x	2.45x	1.32x
2045	11,743,500		11,743,500	11,984,972	58,029,000	4.94x	2.45x	1.21x
2046	12,090,000		12,090,000	12,290,527	59,620,000	4.93x	2.45x	1.22x
2047	12,397,500		12,397,500	12,606,937	61,140,000	4.93x	2.45x	1.23x
2048	12,711,250	on an order	12,711,250	12,937,418	62,714,000	4.93x	2.45x	1.25x
2049	13,059,250	The control of the co	13,059,250	13,260,863	64,358,000	4.93x	2.45x	1.29x
2050	13,728,000		13,728,000	13,260,863	65,967,000	4.81x	2.44x	1.30x
2051	13,984,500		13,984,500	13,669,542	67,595,000	4.83x	2.44x	1.31x
2052	14,026,500		14,026,500	14,342,968	69,368,000	4.95x	2.45x	1.33x
2053	14,497,750	an management	14,497,750	14,673,651	71,150,000	4.91x	2.44x	1.34x
2054	14,495,250	No.	14,495,250	,,	72,995,000	5.04x	5.04x	1.89x
	, ,		,,=		,:::/===			2011
Total	354,232,824	(15,437,176)	338,795,648	315,279,147	1,639,084,000			

TIFIA Loan Repayment Schedule

TIFIA Loan Repayment Caculation - Base Schedule								
Period	Period Current Year							
Ending	Loan	Beginning	Interest		Interest	Principal	Unpaid	Ending
(7/1)	Draw Amt	Balance	Due	Payment	Payments	Payments	Interest	Balance
2017								
2018	78,772,214		2,336,887				2,336,887	81,109,101
2019	77,457,636	81,109,101	4,821,919				4,821,919	163,388,656
2020	10,270,150	163,388,656	5,378,125				5,378,125	179,036,931
2021		179,036,931	5,538,373	(2,412,272)	(2,412,272)		3,126,101	182,163,032
2022		182,163,032	5,636,934	(2,211,250)	(2,211,250)		3,425,684	185,588,716
2023		185,588,716	5,729,441	(4,858,110)	(4,858,110)		871,330	186,460,047
2024		186,460,047	5,739,236	(6,261,857)	(5,739,236)	(522,620)		185,937,426
2025		185,937,426	5,718,993	(6,805,824)	(5,718,993)	(1,086,831)		184,850,595
2026		184,850,595	5,683,673	(7,013,681)	(5,683,673)	(1,330,008)		183,520,586
2027		183,520,586	5,640,659	(7,240,837)	(5,640,659)	(1,600,178)		181,920,408
2028		181,920,408	5,590,842	(7,240,837)	(5,590,842)	(1,649,995)		180,270,413
2029		180,270,413	5,536,712	(7,642,882)	(5,536,712)	(2,106,170)		178,164,243
2030		178,164,243	5,469,995	(7,819,380)	(5,469,995)	(2,349,385)		175,814,857
2031		175,814,857	5,395,365	(8,043,521)	(5,395,365)	(2,648,156)		173,166,701
2032		173,166,701	5,311,244	(8,273,491)	(5,311,244)	(2,962,247)		170,204,454
2033		170,204,454	5,217,623	(8,516,326)	(5,217,623)	(3,298,703)		166,905,752
2034		166,905,752	5,113,276	(8,773,635)	(5,113,276)	(3,660,359)		163,245,393
2035		163,245,393	4,997,727	(9,027,929)	(4,997,727)	(4,030,202)		159,215,191
2036		159,215,191	4,870,422	(9,292,877)	(4,870,422)	(4,422,454)		154,792,737
2037		154,792,737	4,731,088	(9,589,988)	(4,731,088)	(4,858,900)		149,933,837
2038		149,933,837	4,578,213	(9,860,967)	(4,578,213)	(5,282,754)		144,651,083
2039		144,651,083	4,412,030	(10,151,847)	(4,412,030)	(5,739,817)		138,911,267
2040		138,911,267	4,231,347	(10,454,989)	(4,231,347)	(6,223,642)		132,687,624
2041		132,687,624	4,036,309	(10,729,184)	(4,036,309)	(6,692,874)		125,994,750
2042		125,994,750	3,826,316	(11,025,893)	(3,826,316)	(7,199,578)		118,795,173
2043		118,795,173	3,600,473	(11,338,684)	(3,600,473)	(7,738,212)		111,056,961
2044		111,056,961	3,357,561	(11,665,145)	(3,357,561)	(8,307,584)		102,749,376
2045		102,749,376	3,097,521	(11,984,972)	(3,097,521)	(8,887,451)		93,861,926
2046		93,861,926	2,819,347	(12,290,527)	(2,819,347)	(9,471,180)		84,390,746
2047		84,390,746	2,522,972	(12,606,937)	(2,522,972)	(10,083,964)		74,306,781
2048		74,306,781	2,207,197	(12,937,418)	(2,207,197)	(10,730,221)		63,576,560
2049		63,576,560	1,871,965	(13,260,863)	(1,871,965)	(11,388,898)		52,187,663
2050		52,187,663	1,518,487	(13,260,863)	(1,518,487)	(11,742,377)		40,445,286
2051		40,445,286	1,150,916	(13,669,542)	(1,150,916)	(12,518,627)		27,926,659
2052		27,926,659	756,927	(14,342,968)	(756,927)	(13,586,042)		14,340,617
2053		14,340,617	333,033	(14,673,651)	(333,033)	(14,340,617)		
2054								
Total	166,500,000		148,779,147	(315,279,147)	(128,819,100)	(186,460,047)	19,960,047	

Flow of Funds

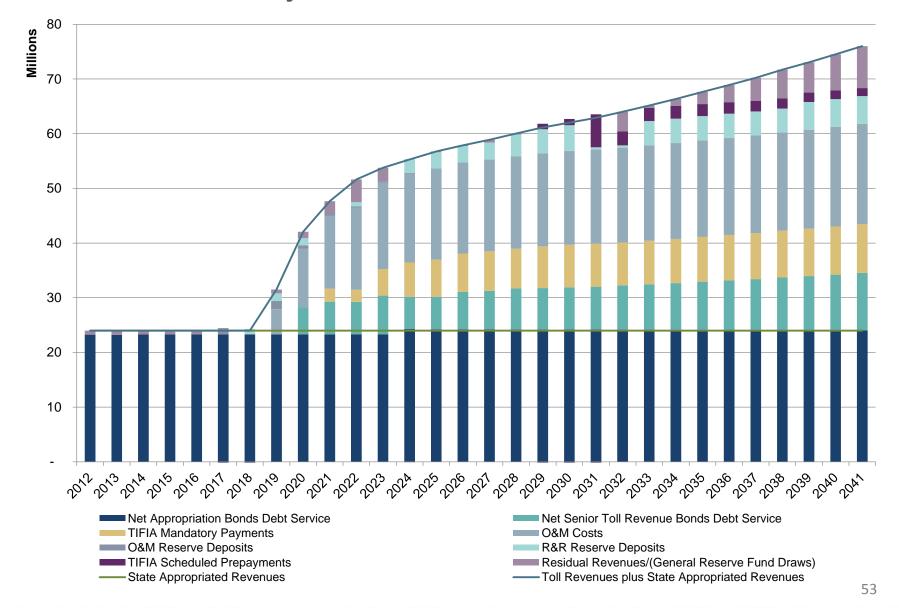
 NCTA has a bifurcated flow of funds consisting of state appropriation revenue bonds and toll revenue bonds with TIFIA secured under the toll revenue bond lien



Notes:

- ¹ Includes TIFIA after certain events
- ² Includes TIFIA unless certain events occur
- ³ After 5 years of operations, funds may be released to Pledged Account upon meeting covenant & coverage conditions
- ⁴ Funds may be used for NCDOT Repayments, Additional System Projects and other legal purposes of NCTA

Project Total Cash Flows



STIP Update

Dennis Jernigan, PE

Project Controls Engineer

Toll Projects in Draft STIP

- Draft STIP (FY 2017 FY 2027) Submitted January 2017
- Final STIP approval: June 2017

STIP#	Project	Limits	ROW	Construction
I-5507	I-485 Express Lanes	I-77 to US-74	FY 2017	FY 2017
R-2576	Mid-Currituck Bridge	Bridge spanning Currituck Sound	FY 2017	FY 2017
U-5526A	US 74 Express Lanes (Phase I)	I-277 to Wallace Lane	FY 2017	FY 2018
R-2721	Complete 540	NC 55 to US 401	FY 2020	FY 2020
R-2828	Complete 540	US 401 to I-40	FY 2020	FY 2020
U-2509	US 74 Express Lanes (Phase II)	Wallace Lane to I-485	FY 2020	FY 2020
I-5718	I-77 Express Lanes	I-485 to I-277	FY 2024	FY 2027
I-5702	I-40 Express Lanes	US 15/501 to Wade Avenue	FY 2026	FY 2026
R-2829	Complete 540	I-40 to US 64	FY 2027	FY 2027